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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/520,077

01/05/2005

Hiroomi Ueda

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05/26/2006

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
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ALEXANDRIA, VA 22314

EXAMINER

NGUYEN, HIEU P

ART UNIT

PAPER NUMBER

2817

DATE MAILED: 05/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/520,077	Applicant(s) UEDA ET AL.	
	Examiner Hieu P. Nguyen	Art Unit 2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

Applicant is required to update the status (pending, allowed, etc.) of all parent priority applications in the first line of the specification. The status of all citations of US filed applications in the specification should also be updated where appropriate.

The specification has not been checked to the extent necessary to determine the presence to all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Drawings

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 and 5 is rejected under 35 U.S.C. 102(e) as being anticipated by Green (U.S. 6922107).

Regarding claim 1, Fig. 4 of Green discloses a high frequency amplifier for amplifying a high frequency signal using a plurality of amplifier sections, said high frequency amplifier comprising: a constant voltage driven amplifier section (401/404) using an amplifying element biased by a constant voltage; and a constant current driven amplifier section (402/403) using an amplifying element biased by a constant current, wherein said constant voltage driven amplifier section and said constant current driven amplifier section are parallelly combined, **meeting claim 1.**

Green further discloses in Fig. 4 the high frequency amplifier, wherein said high frequency amplifier has n amplifier sections including m constant current driven amplifier sections and (n-m) constant voltage driven amplifier sections that are parallelly combined, where n is an integer equal or greater than two (note: in this case, $n \neq 2$), and m an integer equal or greater than one and equal to or less than (n-1), **meeting claim 2.**

Green further discloses in Fig. 4 the high frequency amplifier, wherein each of said constant voltage driven amplifier sections uses a bipolar transistor as the amplifying element, and has its base biased by a constant voltage (see Fig. 4 for detail); and each of said constant current driven amplifier sections uses a bipolar transistor as the amplifying element, and has base biased by a constant current (see Fig. 4 for detail), **meeting claim 3.**

Green's circuit inherently can be read as the high frequency amplifier, further comprising an output matching power supply circuit for supplying power to said constant voltage driven amplifier sections and to said constant current driven amplifier sections, and for carrying out output matching of said constant voltage driven amplifier sections and of said constant current driven amplifier sections, wherein said constant voltage driven amplifier sections comprise in input matching constant voltage bias circuit carrying out input matching and for supplying a constant bias voltage to the amplifying elements, and said constant current driven amplifier sections comprise an input matching constant current bias circuit for carrying out input matching and for supplying constant bias current the amplifying elements, since Green explicitly discloses 405/408, 406/409 and 407/410 for providing matching (see Fig. 4 for detail), **meeting claim 5.**

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4,6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Green.

Regarding claim 4, Green discloses everything claimed as applied to claim 1. In addition, Green discloses in Fig. 4 a combination of constant voltage source (404), an inductor (405) and the capacitor (408), which can be read as "an input matching constant voltage bias circuit" and a

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combination of the constant current source (403), inductor (406) and capacitor 409, which can be read as “an input matching constant current bias circuit”. Green fails to disclose two separated “output matching power supply circuit”.

However, Green further discloses a **common** output matching power supply circuit (V+/inductor 407/ capacitor 410) and this is functionally equivalent to the claimed “output matching power supply circuit”, **meeting claim 4**.

Regarding claim 6, similar to claim 4, Green discloses everything claimed as applied to claim 2 except for a common “an input matching circuit”. However Green discloses two separated input matching circuits (404/405/408 and 403/406/409) and this is functional equivalent to the claimed “input matching circuit”, **meeting claim 6**.

Regarding claim 8, Green discloses everything claimed as applied to claim 2 except for “each of said constant current driven amplifier sections uses a bipolar transistor”. However it would have been to one having ordinary skill in the art at the time the invention was made to implement the constant current driven amplifier sections with bipolar transistor for the purpose of handling larger current, **meeting claim 8**.

Allowable Subject Matter

Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hieu Nguyen whose telephone number is 571-272-8577. The examiner can normally be reached on M-F 8-5.

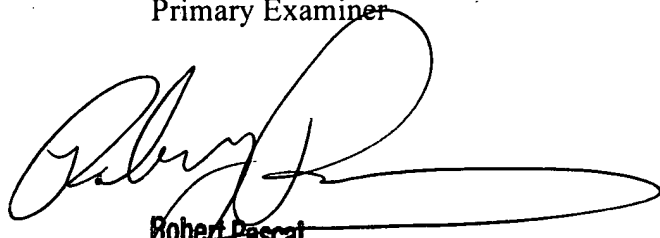
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hieu Nguyen
AU: 2817

hn

Robert Pascal
Primary Examiner



Robert Pascal
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